Oregon Health Authority

Office of Disease Prevention and Epidemiology

The Intersection Between HIV and Other Sexually Transmitted Diseases, Oregon 2010

Other Sexually Transmitted Diseases (STDs) Among People infected with HIV

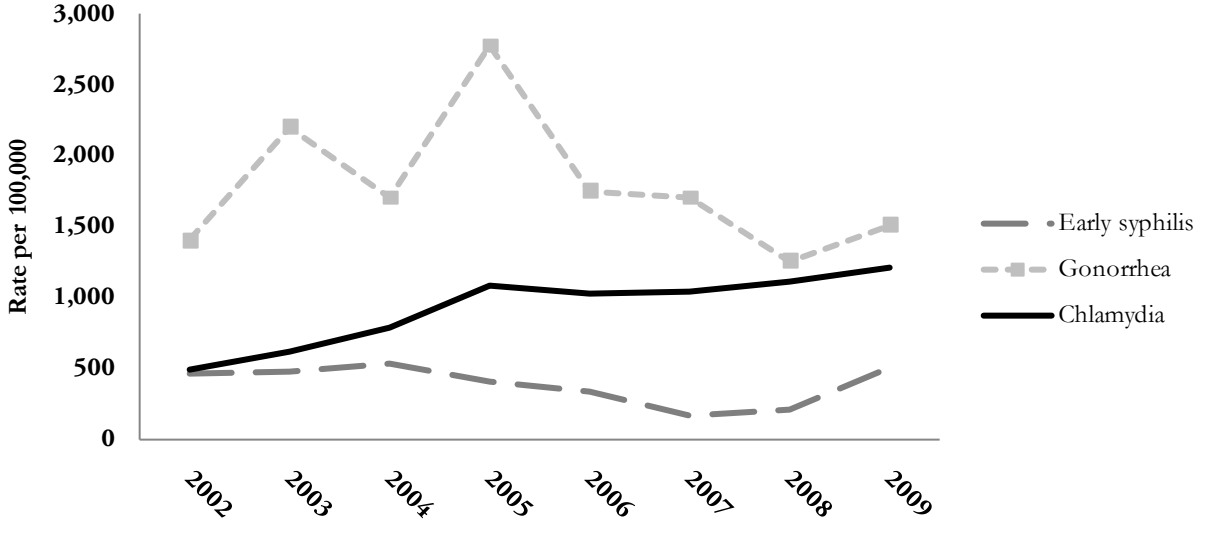
Sexually transmitted diseases (STDs) are indicators of ongoing high-risk sexual behavior, such as multiple concurrent partners and inconsistent condom use. Having another concurrent STD can increase the likelihood that someone with HIV might transmit HIV to uninfected partners.

Rates of other STDs among Oregon men with previously reported HIV infection are much higher than they are in the general population. During 2005–2009, average annual reported rates of early syphilis, gonorrhea and Chlamydia among

Oregon HIV STD Facts at a Glance:

- Rate of syphilis is 116 times higher among people with HIV than among the general population.
- Rate of gonorrhea is 450 times higher among people with HIV than the general population.
- Among people with HIV, the following are more likely than their counterparts to acquire another STD in addition to HIV:
  - -younger people
  - -men who have sex with men
  - -people more recently infected
  - -urban dwellers
- Syphilis and HIV often occur together: about one fourth of the people who have syphilis also have HIV.
- Oregon needs more laboratory capacity to screen for rectal and pharyngeal sexually transmitted infections.

Fig. 1. Rates of other STDs among male cases of HIV aged 13 years and older, Oregon, 2002–2009



male Oregon HIV/AIDS cases were 233, 1,351, and 902 per 100,000, respectively. These rates were 116, 450, and 3-fold higher than reported rates of these STDs in Oregon's general population during the same interval (2, 43 and 326 cases per 100,000 population, respectively). Since 2002, when Oregon first began collecting reports of cases of HIV infection that had not yet progressed to AIDS, rates of Chlamydia have increased steadily among men already infected with HIV (Figure 1).

Rates of syphilis and gonorrhea, while remaining high, do not appear to have increased among people with HIV since 2005. Among Oregon HIV/AIDS cases diagnosed during 2005–2009, some groups had higher rates of STDs (Table 1). After their HIV diagnosis, men were more likely than women, younger people (aged 13–25 yrs.) more likely than older (aged 25–44 yrs.), men who have sex with other men more likely than male injecting drug users (IDU), and men with less advanced HIV disease (never progressed to AIDS) more likely than men with advanced disease to acquire a reported STD. Men with HIV/AIDS from Multnomah County (urban) were more likely to have an STD than those from other counties in Oregon (mixed urban/rural and rural).

Table 1. Other STDs among people with HIV infection, Oregon, 2005–2009

	Number of HIV cases with a subsequent STD	Incidence rate (cases/1,000 person years)	Incidence Rate Ratio (95% CI)*
Sex			
Male	454	24	3.6 (2.3 – 5.7)
Female	19	7	Ref.
Age (yrs.)			
13–24	59	113	3.6 (2.8 – 4.8)
25–44	313	31	Ref.
>44	101	9	0.3 (0.2 – 0.4)
Transmission Risk			
MSM	374	28	Ref.
IDU	15	6	0.2 (0.1 –0.4)
MSM/IDU	46	26	0.9 (0.7 – 1.2)
Heterosexual	19	8	0.3 (0.2 – 0.5)
Delayed Diagnosis**			
AIDS in 12 months	107	13	0.5 (0.4 – 0.6)
Not AIDS in 12 months	366	28	Ref.
Region			
Urban	313	26	Ref.
Mixed Urban/Rural	141	20	0.8 (0.6 – .09)
Rural	19	8	0.3 (0.2 – 0.5)

* 95% confidence interval
**AIDS ≤12 months of HIV diagnosis

Overlapping Risk

Susceptibility to HIV infection can be increased in people who have another STD. In addition to increased susceptibility to HIV infection, having another sexually transmitted disease can be a marker for risky sexual practices that can lead to HIV infection. Accordingly, people with another STD, such as syphilis, are more likely than others to be subsequently diagnosed with HIV. In particular, syphilis is strongly associated with men who have sex with men. In Oregon during 2002–2009, 88% (388/441) of reported syphilis cases occurred in men, and among men who answered questions about sex partners, 83% (309/370) acknowledged sex with other men (Figure 2). And, 27% (66/242) of male syphilis cases during 2005–2009 occurred among men with already reported HIV. Therefore, if someone acquires a new case of syphilis in Oregon, odds are 1:3 that they acquired their infection from someone who also had HIV. The HIV-other STD overlap is less evident for Chlamydia. Only 1.4% (222/15,486) of male Chlamydia reports from 2005–2009 were among males already reported with HIV infection. The reason for this difference is not entirely clear. The overlap among HIV and Chlamydia, would be small as observed, if Chlamydia is truly more prevalent among people with primarily heterosexual partners. Alternatively, Chlamydia might simply be under recognized in men with HIV who have sex with other men, because these cases can be asymptomatic and because Oregon has limited laboratory capacity to test for rectal or pharyngeal Chlamydia.

Summary

Other STDs are highly prevalent among people with HIV and people at risk for HIV. In particular, men with syphilis are likely to have HIV infection already or to acquire it soon. Rates of gonorrhea and Chlamydia are also much higher among men with HIV, though to a lesser extent than syphilis. This could be because these infections don't associate as strongly with HIV risk factors such as MSM or because screening for rectal and pharyngeal infections among MSM is not yet widely available in Oregon. These data should serve to remind health care providers to recommend that all sexually active people be tested for HIV and sexually active people to discover their own HIV status and that of their partners. Sexually active adults should repeat HIV testing periodically, depending upon ongoing risk. People with HIV should be screened annually for syphilis and review their sexual practices with their health care providers. Oregon also needs increased laboratory capacity to screen for rectal and pharyngeal sexually transmitted infections among men who have sex with men.

Fig. 2. Early syphilis cases among males by MSM status, 2002–2009